

CLAIMS

What is claimed is:

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- 1 1. A networking protocol comprising definitions of quality of service enhancements to
2 provide reliable multimedia data stream connections in a wireless computer network.
 - 1 2. The protocol of claim 1 wherein the quality of service enhancements comprise a
2 multimedia control field.
 - 1 3. The protocol of claim 2 wherein the multimedia control field comprises a frame
2 position sub-field, a stream index sub-field, a basic service set session identification sub-field
3 and a time stamp sub-field.
 - 1 4. The protocol of claim 1 wherein the quality of service enhancements comprise a
2 capability information field.
 - 1 5. The protocol of claim 1 wherein the quality of service enhancements comprise a
2 forward error correction based on Reed Soloman coding.
 - 1 6. The protocol of claim 1 wherein the quality of service enhancements comprise a
2 retransmission mechanism to improve the efficiency of multimedia data stream
3 transmissions.
 - 1 7. The protocol of claim 1 wherein the quality of service enhancements comprise a
2 multimedia type definition in a medium access control header frame.

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1 8. The protocol of claim 7 wherein the multimedia type is indicated within a frame
2 control field.

3 9. The protocol of claim 8 wherein the multimedia type is indicated by setting to logic
4 high both bites of a two bite sub-field within the frame control field.

5 10. An interface between a wireless network component and the wireless medium, the
6 interface communicating multimedia data streams as defined by a networking protocol that
7 includes definitions of quality of service enhancements to provide reliable communications
8 of said multimedia data streams.

9 11. A system comprising and interface wherein the interface communicates multimedia
10 data streams as defined by a networking protocol that includes definitions of quality of
11 service enhancements to provide reliable communications of said multimedia data streams.

1 12. A machine-readable medium that provides instructions, which when executed by a
2 machine, cause said machine to implement a networking protocol defining quality of service
3 enhancements to provide reliable multimedia data stream connections in a wireless computer
4 network.

1 13. The machine-readable medium of claim 12 wherein the instructions comprise one or
2 more of the following commands:

3 Null Command, Restart All Stream Connections, Restart All Stream Connections
4 Ack, Stream Connection Request, Stream Connection Accept, Stream Connection Negotiate,
5 Stream Connection Reject, Stream Connection Complete, Stream Disconnect, Stream

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- 6 Disconnect Ack, Stream Authorization Permission Request, Stream Authorization Grant,
- 7 Stream Authorization Reject, Dynamic Bandwidth Management (DBM), Dynamic
- 8 Bandwidth Request (DB-Req), Dynamic Bandwidth Request Ack (DB-Req-Ack), Dynamic
- 9 Bandwidth Grant (DB-Grant), Dynamic Bandwidth Grant Ack (DB-Grant-Ack), Remain
- 10 Quiet and Remain Quiet Ack, Change Channel and Change Channel Ack, Channel status, PC
- 11 Redundancy, PCR Negotiation, PCR Pullout, APC Assuming PC Responsibility, PPC
- 12 Service Request, PPC Provider Request, PPC Service for Subnet Connection, PPC
- 13 Permission Grant, PPC Permission Ack, PPC Permission Reject, PPC Service Break, PPC
- 14 Service Break Ack, PPC-OSB Provider Request, PPC-OSB Provider Accept, PPC-OSB
- 15 Provider Reject, PPC-OSB Provider Ack, PPC-OSB-Tunneling, PPC-OSB Relieve Request,
- 16 PPC-OSB Relieve Request Ack, Overlapping Subnet Bandwidth Negotiation, Overlapped
- 17 Subnet Bandwidth Request (OSB-Req), Overlapped Subnet Bandwidth Request Ack (OSB-
- 18 Req-Ack), Overlapped Subnet Bandwidth Grant (OSB-Grant), Overlapped Subnet
- 19 Bandwidth Ack (OSB-Ack), Master coordinator Relieve Request, Master coordinator Relieve
- 20 Request Ack, BSS-SID Allocation, Retransmission Request, Retransmission Fail,
- 21 Retransmission Fail Ack, Retransmission Resync, and Retransmission Resync Ack.